WHAT IS CLAIMED IS:

1. A method for automatic adjustment of multiple bias potentials comprising:

providing a system having a power supply with capabilities for monitoring biased components electrically connected to the power supply;

attaching a biased component to a feedback signal to observe potential through a biased load;

comparing the feedback signal to an expected bias potential; and

controlling an output of the power supply in response to a feedback signal by adjusting the output of the power supply in response to the feed back signal.

2. The method of claim 1 wherein the comparing step further comprises comparing the feedback signal with a range of potentials as the expected bias potential.

3. The method of claim 2 wherein prior the step of comparing is performed digitization and software-filtering step on the feedback signal are performed.

4. The method of claim 1 wherein the step of attaching further comprises attaching the feedback signal to a rotating connection on the biased load.

5. The method of claim 4 wherein the step of attaching further comprises a spring loaded carbon contact as the rotating connection.

6. The method of claim 1 wherein the step of providing further comprises providing the system as a networked system.

7. The method of claim 6 wherein the step of providing further comprises the system having multiple imaging modules attached to the power supply through multiple feed back signals.

8. The method of claim 7 wherein the step of attaching further comprises attaching the feedback signals to multiple biased components within each of the modules.

9. An integrated bias potential control and diagnostic system for use within an electrophotographic imaging that allows for automatic adjustment of multiple bias potentials and the sensing if those potentials for the purpose of controlling and monitoring the function of the imaging module comprising:

a) a networked system having facilities for controlling and monitoring at least one imaging module with at least one biased component;

b) a power supply having at least one control signal operatively connected to the bias load feedback;

c) a feedback connection connected to the biased load;

d) comparison means operatively connected to the power supply for comparing the bias feedback signal to an expected bias potential determined; and

e) means responsive to the comparison means for taking corrective action when the bias feedback does not match the expected bias potential.

10. The system of claim 9 further comprising:

the means responsive to the comparison means further comprising a bias error signal provided from the power supply to a machine control system; and

a software-filtering module that applies a predetermined set of parameter to the bias error signal to determine if an error should generated.

11. A method for detecting error conditions within a biased load:

providing a system having a power supply operatively configured to monitor biasing of components;

attaching a feedback signal to the power supply that observes current traveling from the power supply and through the biased component;

comparing the feedback signal to a set of predetermined parameters; and

responding to the comparing step to determine the existence of an undesirable condition.

12. The method of claim 11 wherein the step of responding further comprises determining the existence of one of the following: (open load, over load, shorted load intermittent contact with the load, arcing conditions, or power supply output failure) as the undesirable condition.

13. The method of claim 11 wherein the step of responding further comprises controlling an output of the power supply in response to a feedback signal by adjusting the output of the power supply in response to the feed back signal.

14. The method of claim 11 wherein the step of comparing further comprises sensing the feedback signal by either interrupt or sampling prior comparing.

15. The methods of claim 11 wherein the step of responding further comprises a step of software filtering of the feedback signal.

16. The method of claim 15 wherein the step of software filtering further comprises a step of digital filtering the feedback signal to determine if an error state exist, the step of digital filtering further comprising sampling the feedback signal for a predetermined number of consecutive samples.

17. The method of claim 15 wherein the step of software filtering further comprises the step sampling the feedback signal to determine if a biasing error exists and determining if the biasing error is significant then instructing the system to shutdown.

18. The method of claim 11 wherein the step of providing further comprises as one of the monitored components a toning roller and the step of responding further comprises adjusting bias level to control a toner biasing level for the toning roller.

19. The method of claim 18 wherein the biasing levels are set as part of the electrophotographic process control including a DC bias level of the toning roller bias to control toning density and an AC component of the bias per a predetermined ratio relative to the DC bias set point.

20. The method of claim 19 wherein the toning density is monitored by a transmission densitometer in the system.